Groundwater facies in Peninsular Malaysia

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The groundwater in Malaysia can be divided into several water-types or facies. The classification of groundwater into facies is based on the analysis of major anions and cations contents of the water. The concentration of the ions are expressed in milliequivalent per litre and under normal conditions the total anions will be approximately equal to the cations. The trend of facies change can be presented in the form of Duror diagram. Generally, it was found that the water changes from calcium bicarbonate type in the interior towards sodium chloride type in the coastal area. However, in some coastal areas where reverse ion-exchange has taken place the chloride facies is of calcium chloride type. Chemically, the groundwater in most areas is within the acceptable limit for drinking or agricultural purposes. Biologically, the shallow groundwater may be contaminated with pathogens as evidence from the high E. Coli count in some well waters.

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